Dear members of the Environment Committee.

Thank you for the opportunity to submit testimony. Although I am a state employee, I am submitting my testimony as an individual, and not on behalf of a state agency.

I am a PhD entomologist, working in agriculture for the last 34 years, and also a member of the Connecticut Climate Crisis Coalition and 350 CT. I am also a member of the Xerces Society for Invertebrate Conservation.

I am writing in support of HB 5289 and SB 243.

I support HB 5289 as a first step toward reducing lighting at night in state buildings. As written, this bill would eliminate lighting of state buildings during certain hours during the fall migration period for birds. While I support this limited measure, I hope it opens up an opportunity to question why we light state buildings - or any other buildings for that matter - at night.

As noted by Audubon Connecticut, collisions with buildings kill enormous numbers of birds, and lighting at night contributes to the confusion that causes birds to collide with the buildings.

As an entomologist, I want to make sure you take into account that lights at night kill and confuse a wide range of insects, particularly moths and fireflies. Lights at night have been identified by many researchers, including Dr. David Wagner of UConn, as drivers of the "insect apocalypse" — the alarming decline in insect abundance and diversity over a wide range of insect taxa.

## References:

Xerces Society: <a href="https://xerces.org/blog/to-protect-moths-turn-out-lights">https://xerces.org/blog/to-protect-moths-turn-out-lights</a>

Avalon et al. 2020. Light pollution is a driver of insect declines.

https://sites.warnercnr.colostate.edu/wp-

content/uploads/sites/146/2020/11/biologicalconservation2020.pdf

Wagner et al. 2021. Insect decline in the Anthropocene. Note that light pollution is mentioned as one of the drivers. <a href="https://www.pnas.org/doi/10.1073/pnas.2023989118">https://www.pnas.org/doi/10.1073/pnas.2023989118</a>

As an activist on climate, I will point out that lighting buildings at night is a waste of electricity (and also a waste of state taxpayer money).

https://www.darksky.org/light-pollution/energy-waste/

And, I will point to emerging evidence that light pollution harms human health. <a href="https://www.darksky.org/light-pollution/human-health/">https://www.darksky.org/light-pollution/human-health/</a>

And finally, why are we lighting these buildings at night anyway? If we can turn off the lights during the bird migration period, why can't we turn them off all the time? Often people argue for lighting on the basis of safety. Evidence shows that lighting makes people feel safer, but it does NOT actually improve safety, and poorly designed lighting can actually make people less safe by increasing glare and reducing vision.

https://www.darksky.org/light-pollution/lighting-crime-and-safety/

I am also writing in support of SB 243. In my experience working with farmers who are considering application for NRCS (Natural Resources Conservation Service) programs, the

initial outlay and matching funds can be a barrier to utilizing these Federal programs for conservation. This bill would assist farmers in accessing those NRCS and other USDA programs supporting agricultural practices that reduce greenhouse gas emissions, and that have other environmental and agricultural benefits.

Sincerely,

Kimberly Stoner, New Haven, Connecticut